

Regional HIV/AIDS Epidemiologic Profile of Western Health Service Region, Massachusetts: 2011

Recent changes to the presentation of Massachusetts HIV/AIDS surveillance data

Effective January 1, 2011, the Massachusetts Department of Public Health (MDPH), Bureau of Infectious Diseases, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed while residing in another state before being reported in Massachusetts. As of January 1, 2011, this resulted in the removal of 2,297 HIV/AIDS cases, of which 739 have died and 1,558 were living. These persons living with HIV/AIDS may currently reside and receive care in the Commonwealth. The total number of persons living in Massachusetts with HIV/AIDS, irrespective of location of diagnosis, is the basis for MDPH service planning. This change is partially a result of increased activities required by the Centers for Disease Control and Prevention (CDC) for de-duplication among states in an effort to identify cases that are counted multiple times in the National HIV/AIDS surveillance system. The cases are assigned to the state that reports the earliest date of AIDS diagnosis, if available. If the case has not progressed to AIDS, the case is assigned to the state with the earliest HIV diagnosis date. Please note that all previous HIV/AIDS fact sheets, data reports and presentations include cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the Massachusetts Department of Public Health (MDPH) HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual exposure mode category for males; those cases have been reassigned to the no identified risk (NIR) exposure mode category. The presumed heterosexual exposure mode category was used with the intention of identifying HIV exposure mode for females when sex with males is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. Twenty-nine percent of females living with HIV/AIDS and 41% of recent HIV diagnoses among females are reported in the presumed heterosexual exposure mode category. The application of the presumed heterosexual exposure mode category to males is overly inclusive in that female to male HIV transmission is biologically less probable, and there are alternate exposure modes that are possible for males, including sex with other men (MSM) or IDU. The CDC reports males diagnosed with HIV/AIDS who report sex with females as their only risk factor, without corresponding partner risk or HIV status information, in the NIR exposure mode category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for males in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual exposure mode categories for females.

Table 1. Total number of people reported with HIV infection or AIDS¹ by mortality status on December 31, 2010: Western Health Service Region, Massachusetts²

	N	%
People Living with HIV/AIDS	1,978	57%
People Reported with HIV or AIDS who are Deceased	1,494	43%
Total Number of People Reported with HIV Infection or AIDS	3,472	100%

¹ Does not include individuals diagnosed with HIV infection (non-AIDS) who died prior to January 1, 1999 or who were not in care on January 1, 1999

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/11

Table 2. Average annual rate of HIV infection diagnosis from 2007 to 2009 and HIV/AIDS prevalence rate on 12/31/10¹: Western Health Service Region, Massachusetts²

Average annual HIV diagnosis rate from 2007–2009	Average rate per 100,000	Average annual number of HIV diagnoses
Western Health Service Region,		
MA	7.4	62
Massachusetts Total	9.4	607.3
HIV/AIDS prevalence rate on 12/31/10	Rate per 100,000	Number of people living with HIV/AIDS
Western Health Service Region,		
MA	237.4	1,978
Massachusetts Total	273.7	17,621

¹ The denominators for prevalence calculations are based on year 2005 population estimates from the MDPH Bureau of Health Statistics, Research and Evaluation.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/11

Table 3. People living with HIV/AIDS¹, deaths among people reported with HIV/AIDS, and newly diagnosed HIV infections by year²: 2000–2009, Western Health Service Region, Massachusetts³

Year	HIV/AIDS Prevalence	Deaths among those with HIV/AIDS	Diagnosis of HIV Infection
2000	1,477	58	142
2001	1,561	42	126
2002	1,617	49	105
2003	1,682	52	117
2004	1,755	56	129
2005	1,810	48	103
2006	1,858	43	91
2007	1,893	42	77
2008	1,916	38	61
2009	1,929	35	48

¹ Number of people living with HIV/AIDS on 12/31 of each year

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/11

Table 4. People diagnosed with HIV infection from 2007–2009¹ and people living with HIV/AIDS on December 31, 2010 by gender, place of birth, race/ethnicity, exposure mode, age at HIV infection diagnosis and current age: Western Health Service Region, Massachusetts²

HIV Infection Diagnoses			PLWH/A	
Gender:	N	%	N	%
Male	134	72%	1,232	62%
Female	52	28%	746	38%
Place of Birth:	N	%	N	%
US	134	72%	1,368	69%
Puerto Rico/US Dependency ³	36	19%	504	25%
Non-US	16	9%	106	5%
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	71	38%	612	31%
Black (non-Hispanic)	38	20%	383	19%
Hispanic/Latino	73	39%	959	48%
Other/Undetermined ⁴	4	2%	24	1%
Exposure Mode:	N	%	N	%
Male-to-male sex (MSM)	74	40%	473	24%
Injection Drug Use (IDU)	24	13%	599	30%
MSM/IDU	2	1%	60	3%
Heterosexual Sex	22	12%	367	19%
Other	1	1%	63	3%
Total Undetermined	63	34%	416	21%
• Presumed Heterosexual Sex ⁵	20	11%	174	9%
• Undetermined ⁶	43	23%	242	12%
Age:	N	%	N	%
	At Diagnosis		On December 31, 2010	
Under 13	1	1%	10	1%
13 to 19	7	4%	29	1%
20 to 24	8	4%	44	2%
25 to 29	28	15%	70	4%
30 to 34	16	9%	120	6%
35 to 39	31	17%	202	10%
40 to 44	23	12%	358	18%
45 to 49	35	19%	433	22%
50 to 54	16	9%	324	16%
55 to 59	12	6%	219	11%
60+	9	5%	169	9%
Total	186	100%	1,978	100%

¹ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Ninety-seven percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 3% were born in an unknown dependency.

⁴ Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity

⁵ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁶ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/11

Table 5. People living with HIV/AIDS on December 31, 2010 by gender and race/ethnicity: Western Health Service Region, Massachusetts¹

Race/Ethnicity:	Male		Female	
	N	%	N	%
White (non-Hispanic)	456	37%	156	21%
Black (non-Hispanic)	216	18%	167	22%
Hispanic/Latino	545	44%	414	55%
Other/Undetermined ²	15	1%	9	1%
Total	1,232	100%	746	100%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 6. People living with HIV/AIDS on December 31, 2010 by gender and exposure mode: Western Health Service Region, Massachusetts¹

Exposure Mode:	Male		Female	
	N	%	N	%
Male-to-male sex (MSM)	473	38%	N/A	N/A
Injection drug use (IDU)	379	31%	220	29%
MSM/IDU	60	5%	N/A	N/A
Heterosexual sex	86	7%	281	38%
Other	35	3%	28	4%
Total Undetermined	199	16%	217	29%
• Presumed heterosexual sex ²	N/A	N/A	174	23%
• Undetermined ³	199	16%	43	6%
Total	1,232	100%	746	100%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Includes female sex with male of unknown HIV status or risk. This category is limited to females.

³ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

N/A=Not Applicable

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 7. People diagnosed with HIV infection by gender and year of diagnosis: Western Health Service Region, Massachusetts¹, 2000–2009²

	Male		Female		Total
	N	%	N	%	
2000	95	67%	47	33%	142
2001	82	65%	44	35%	126
2002	70	67%	35	33%	105
2003	77	66%	40	34%	117
2004	80	62%	49	38%	129
2005	63	61%	40	39%	103
2006	56	62%	35	38%	91
2007	53	69%	24	31%	77
2008	43	70%	18	30%	61
2009	38	79%	10	21%	48

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 8. People diagnosed with HIV infection by race/ethnicity and year of diagnosis: Western Health Service Region, Massachusetts¹, 2000–2009²

	White NH		Black NH		Hispanic/Latino		Other/ Undetermined ³		Total
	N	%	N	%	N	%	N	%	
2000	41	29%	34	24%	65	46%	2	1%	142
2001	42	33%	23	18%	59	47%	2	2%	126
2002	33	31%	21	20%	50	48%	1	1%	105
2003	37	32%	23	20%	54	46%	3	3%	117
2004	30	23%	37	29%	61	47%	1	1%	129
2005	29	28%	22	21%	49	48%	3	3%	103
2006	29	32%	14	15%	47	52%	1	1%	91
2007	27	35%	15	19%	35	45%	0	0%	77
2008	24	39%	13	21%	22	36%	2	3%	61
2009	20	42%	10	21%	16	33%	2	4%	48

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity.

NH = Non-Hispanic

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 9. People diagnosed with HIV infection by place of birth and year of diagnosis: Western Health Service Region, Massachusetts¹, 2000–2009²

	US		Puerto Rico/ US Dependency ³		Non-US		Total
	N	%	N	%	N	%	
2000	106	75%	28	20%	8	6%	142
2001	85	67%	33	26%	8	6%	126
2002	69	66%	23	22%	13	12%	105
2003	85	73%	25	21%	7	6%	117
2004	78	60%	36	28%	15	12%	129
2005	66	64%	27	26%	10	10%	103
2006	60	66%	22	24%	9	10%	91
2007	52	68%	17	22%	8	10%	77
2008	45	74%	12	20%	4	7%	61
2009	37	77%	7	15%	4	8%	48

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Ninety-seven percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 3% were born in an unknown dependency.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 10. People diagnosed with HIV infection by exposure mode and year of diagnosis: Western Health Service Region, Massachusetts¹, 2000–2009²

	MSM		IDU		MSM/ IDU		HTSX		Other		Pres. HTSX ³		Undeter- mined ⁴		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2000	31	22%	49	35%	6	4%	23	16%	3	2%	9	6%	21	15%	142
2001	33	26%	46	37%	1	1%	19	15%	1	1%	11	9%	15	12%	126
2002	23	22%	29	28%	3	3%	23	22%	1	1%	11	10%	15	14%	105
2003	31	26%	27	23%	5	4%	22	19%	1	1%	16	14%	15	13%	117
2004	24	19%	30	23%	3	2%	23	18%	4	3%	15	12%	30	23%	129
2005	27	26%	27	26%	0	0%	17	17%	0	0%	10	10%	22	21%	103
2006	29	32%	22	24%	1	1%	10	11%	0	0%	15	16%	14	15%	91
2007	25	32%	15	19%	1	1%	12	16%	0	0%	8	10%	16	21%	77
2008	29	48%	6	10%	0	0%	7	11%	1	2%	8	13%	10	16%	61
2009	20	42%	3	6%	1	2%	3	6%	0	0%	4	8%	17	35%	48

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁴ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

MSM = Male-to-Male Sex; IDU = Injection Drug Use; MSM/IDU = Male-to-Male Sex and Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 11. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by year of diagnosis: Western Health Service Region, Massachusetts¹, 2000–2009²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Year:	N	N	%
2000	51	142	36%
2001	37	126	29%
2002	30	105	29%
2003	31	117	26%
2004	40	129	31%
2005	38	103	37%
2006	23	91	25%
2007	30	77	39%
2008	15	61	25%
2009	16	48	33%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.
Data Source: MDPH HIV/AIDS Surveillance Program, data as of 1/1/11

Table 12. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by gender, race/ethnicity, and place of birth: Western Health Service Region, Massachusetts,¹ 2007–2009²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Gender:	N	N	%
Male	52	134	39%
Female	9	52	17%
Race/Ethnicity:	N	N	%
White (non-Hispanic)	26	71	37%
Black (non-Hispanic)	12	38	32%
Hispanic/Latino	23	73	32%
Other/Undetermined ³	0	4	0%
Place of Birth:	N	N	%
US	48	134	36%
Puerto Rico/US Dependencies ⁴	8	36	22%
Non-US	5	16	31%
Total	61	186	33%

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² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

³ Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity.

⁴ Ninety-nine percent of people diagnosed with HIV infection from 2007–2009 who were born in a US dependency were born in Puerto Rico, <1% were born in the US Virgin Islands and <1% were born in Guam.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11